

52. (New) A method for cloning or subcloning an amplified nucleic acid molecule comprising:

- (a) amplifying a nucleic acid template with a first primer comprising at least a first recombination site and a second primer comprising at least a second recombination site, wherein said first and second recombination sites do not recombine with each other, under conditions favoring the production of a product nucleic acid molecule complementary to all or a portion of said template and comprising said first and second recombination sites; and
- (b) combining said product nucleic acid molecule with at least one vector comprising at least a third and a fourth recombination sites that do not recombine with each other, under conditions such that recombination occurs between said first and third and said second and fourth recombination sites, thereby producing a product vector.

53. (New) The method of claim 52, wherein said amplification is accomplished by PCR.

54. (New) The method of claim 52, further comprising inserting said product vector into a host cell.

55. (New) The method of claim 52, wherein said vector is an expression vector.

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56. (New) The method of claim 52, wherein said vector comprises at least one additional nucleic acid sequence selected from the group consisting of a selectable marker, a cloning site, a restriction site, a promoter, an operon, an origin of replication, and a gene or partial gene.

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57. (New) The method of claim 52, wherein said vector comprises at least one origin of replication.

58. (New) The method of claim 52, wherein said vector comprises at least one promoter.

59. (New) The method of claim 52, wherein said vector comprises at least one selectable marker.

60. (New) The method of claim 52, wherein said nucleic acid molecule and said vector are combined *in vitro*.

61. (New) The method of claim 52, wherein said product nucleic acid molecule is linear.

62. (New) The method of claim 52, wherein said first, second, third or fourth recombination sites are *lox* sites or mutants thereof.

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63. (New) The method of claim 62, wherein said *lox* sites are selected from the group consisting of *loxP* sites and *loxP511* sites.

64. (New) The method of claim 52, wherein said first, second, third or fourth recombination sites are *att* sites or mutants thereof.

65. (New) The method of claim 64, wherein said *att* sites are selected from the group consisting of *attB* sites, *attP* sites, *attL* sites and *attR* sites.

66. (New) The method of claim 52, wherein said first, second, third or fourth recombination sites are selected from the group consisting of a *lox* site, an *att* site, an FRT site, and mutants thereof.

67. (New) The method of claim 52, wherein said product nucleic acid molecule and said vector are combined in the presence of at least one recombination protein.